Title (en)

APPARATUS AND METHOD FOR PERFORMING A CHECK TO OPTIMIZE INSTRUCTION FLOW

Title (de)

VORRICHTUNG UND VERFAHREN ZUR DURCHFÜHRUNG EINER ÜBERPRÜFUNG ZUR OPTIMIERUNG VON EINES BEFEHLSFLUSSES

Title (fr)

APPAREIL ET PROCÉDÉ POUR METTRE EN OEUVRE UNE VÉRIFICATION AFIN D'OPTIMISER UN FLUX D'INSTRUCTIONS

Publication

EP 3238066 A1 20171101 (EN)

Application

EP 15873961 A 20151123

Priority

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Abstract (en)

[origin: US2016179515A1] An apparatus and method for performing a check on inputs to a mathematical instruction and selecting a default sequence efficiently managing the architectural state of a processor. For example, one embodiment of a processor comprises: an arithmetic logic unit (ALU) to perform a plurality of mathematical operations using one or more source operands; instruction check logic to evaluate the source operands for a current mathematical instruction and to determine, based on the evaluation, whether to execute a default sequence of operations including executing the current mathematical instruction by the ALU or to jump to an alternate sequence of operations adapted to provide a result for the mathematical instruction having particular types of source operands more efficiently than the default sequence of operations.

IPC 8 full level

G06F 11/22 (2006.01); **G06F 9/30** (2006.01)

CPC (source: CN EP KR US)

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Designated contracting state (EPC)

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US 2016179515 A1 20160623; **US 9696992 B2 20170704**; CN 107003840 A 20170801; CN 107003840 B 20210525; EP 3238066 A1 20171101; EP 3238066 A4 20180808; JP 2018507453 A 20180315; JP 6738579 B2 20200812; KR 102462283 B1 20221103; KR 20170097617 A 20170828; TW 201640334 A 20161116; TW I564796 B 20170101; WO 2016105754 A1 20160630

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